ASX Announcement

Blesberg Lithium and VSUN Energy Update

Highlights:

BLESBERG LITHIUM PROJECT

- **Sampling of Blesberg Mine historical stockpiles highlights Spodumene (Lithium) and Feldspar exploration potential.**
  - **+20kg Spodumene samples graded between 2.86% and 4.76% Li_2O**
  - **Feldspar sample meets technical specifications of local customers**
- **Experienced local drilling contractor awarded tender for Q1 2017 drill programme.**
- **Numerous untested pegmatites identified from satellite mapping and ground surveys.**
- **New prospective areas identified with potential for additional pegmatites under shallow sand cover.**

VSUN ENERGY UPDATE

- **VSUN Energy submits EOI for Kalbarri Reliability Improvement Project.**

Australian Vanadium Limited (ASX:AVL, "the Company" or "AVL") is pleased to announce that preparations at the Blesberg Project are well advanced and an experienced drilling contractor has been awarded the tender for the initial drilling program. The drilling program remains on schedule to commence in March 2017.

16 February 2017

ASX ANNOUNCEMENT

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Gabanintha - Vanadium
Blesberg – Lithium/Tantalum

Initial exploration results from satellite mapping, ground reconnaissance and sampling suggest the Prospecting Right has excellent pegmatite potential which is amenable to simple, cost effective exploration techniques.

Blesberg Project Overview

The Blesberg Project is located approximately 80km north of Springbok in the remote Northern Cape Province of South Africa (see Figure 1). It lies at the western end of the Northern Cape Pegmatite Belt.

The deposit is one of the largest known economically mineralised and exploited pegmatite deposits in the Pegmatite Belt.

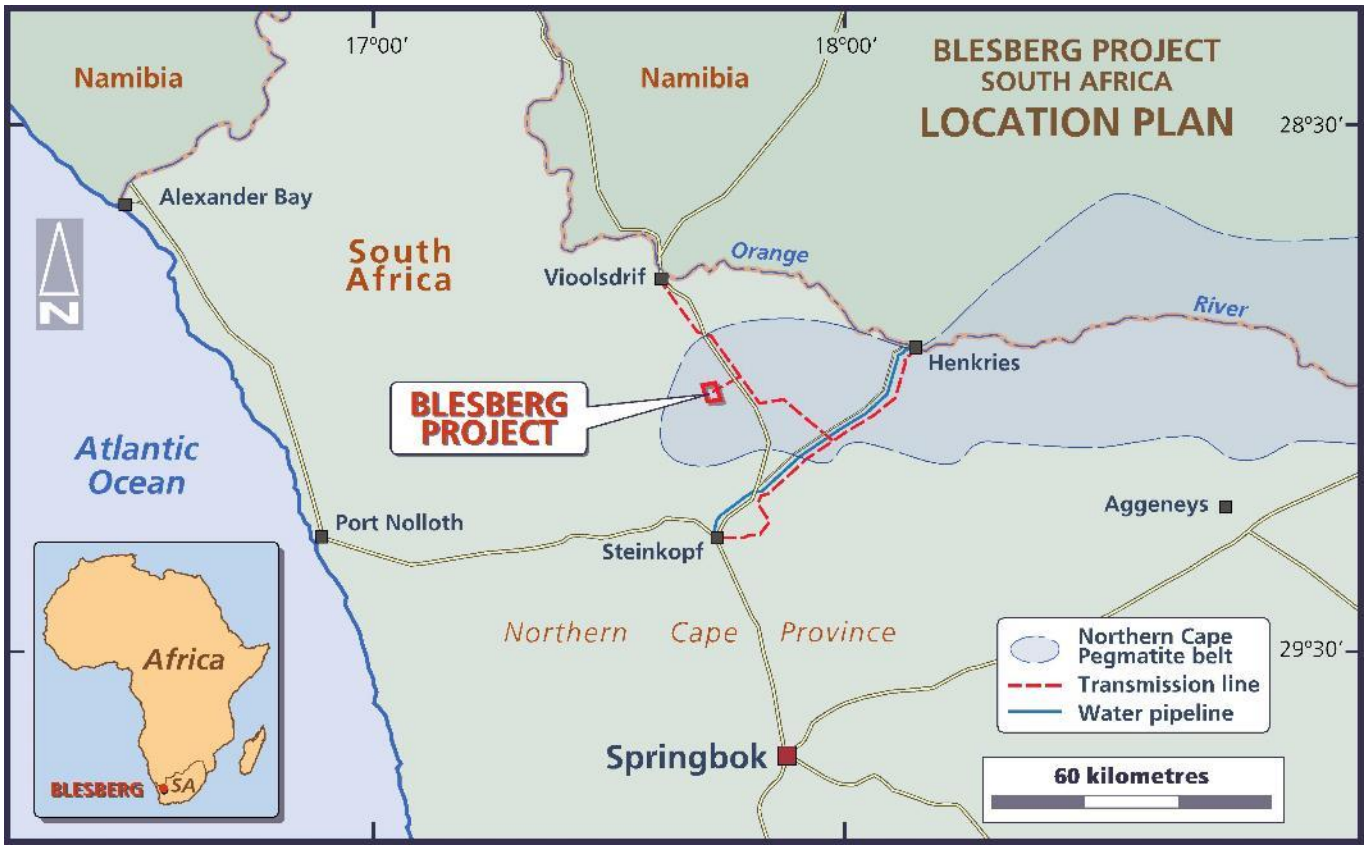

Figure 1 – Location Map

Drilling Programme

The Company has appointed an experienced drilling contractor to carry out the initial exploration drilling during the first quarter of 2017. AVL has planned a comprehensive drill program (see Figure 2) to enable the company to calculate and report a mineral resource estimate in accordance with the 2012 JORC Code.

Information from the drill program will assist the Company to resolve:

- The lateral extent and depth of the Noumas 1 pegmatite under the current Blesberg Mine;
- The lateral extent and depth of the adjacent pegmatite bodies under the current Blesberg Mine;
- The lateral extent and depth of the Noumas 1 pegmatite extension to the west of the current Blesberg Mine on the alluvial plain, and
- Volumetric and analytical assessment of the current dump and ramp material at Blesberg.

AVL looks forward to reporting progress on these exploration activities as they are completed.

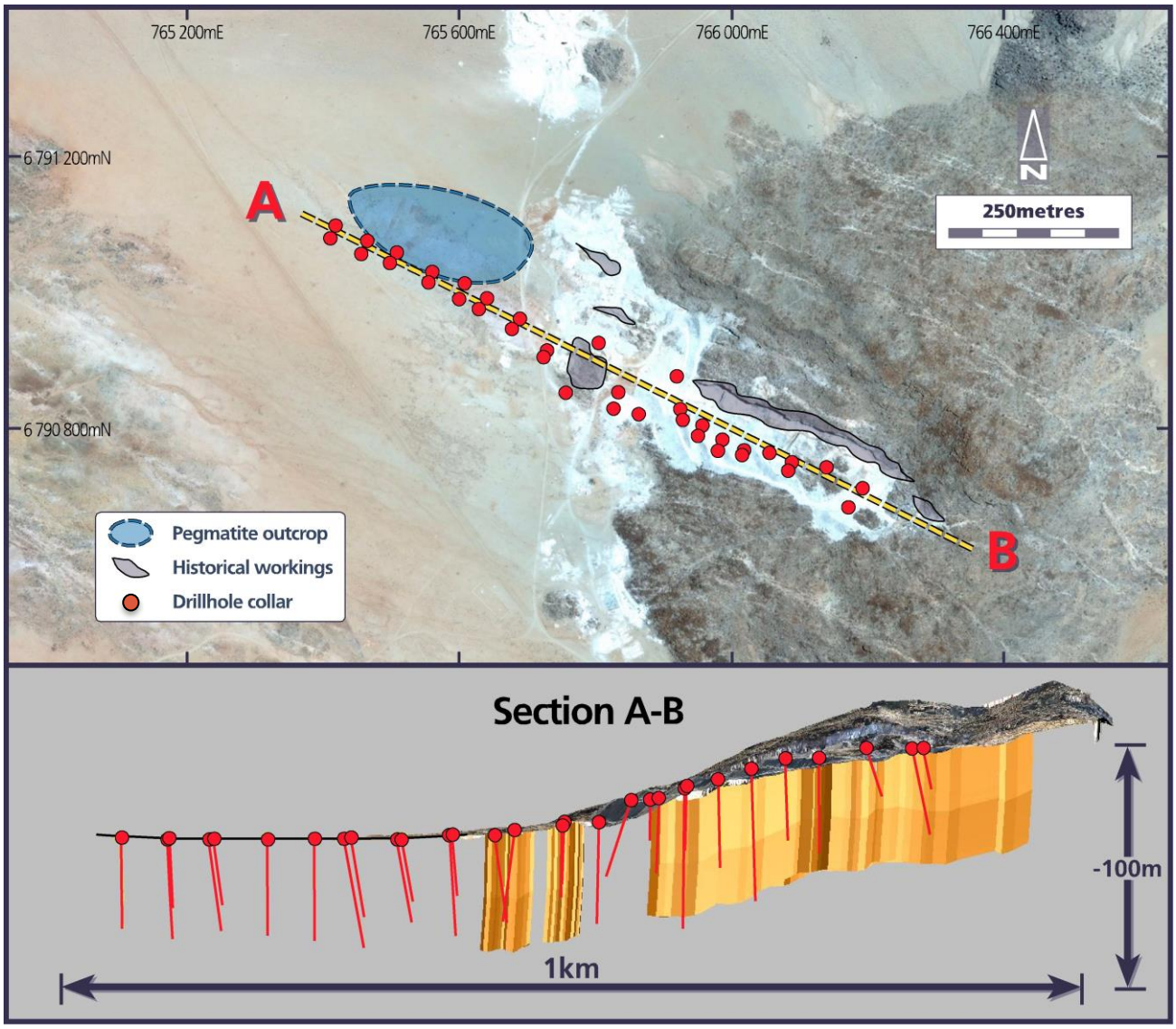

Figure 2 – Blesberg Hill showing old mine workings
and outcropping pegmatite with inset pegmatite projections and planned drill holes

Blesberg Mine Composite Sampling

A total of 4 composite samples were taken from 3 sample sites which were considered representative of the Spodumene, Beryl and Feldspar mineralisation observed in some of the Blesberg Mine stockpiles. The Spodumene sample was further differentiated into 2 x 23kg composite samples based on colour.

The sampling was not intended to provide a representative grade of the pegmatite but rather an indication of the quality of historical products.

The composite spodumene samples reported lithium contents between 2.86% - 4.76% Li_2O indicating highly prospective Lithium grades.

AVL is awaiting final results for the Beryl sample.

For the Feldspar, Al_2O_3 was within 18% ± 2%; Fe_2O_3 was <0.12%; K_2O +Na_2O+LiO_2+Rb_2O was >11%; CaO+MgO was <1%; and Al_2O_3+K_2O+CaO+MgO was >30%, thereby meeting all the technical specifications of existing local purchasers of Feldspar.

A summary of assay results is shown below in Tables 1a and 1b.

Table 1a - Spodumene Samples

Sample ID	Sample Wt. (kg)	Easting (m)	Northing (m)	Elev. (m)	Sample Description	Li (%)	Li_2O (%)	Ta (ppm)	Th (ppm)	U (ppm)
BBG3	23.5	765850	6790734	716	Spodumene, Light Pink	2.21	4.76	11	<5	<5
BBG4	23.4	765850	6790734	716	Spodumene, Pink-Purple	1.33	2.86	<5	<5	<5

Table 1b - Feldspar Sample

Sample ID	Sample Wt. (kg)	Easting (m)	Northing (m)	Elev. (m)	Sample Description	Al_2O_3 (%)	Fe_2O_3 (%)	K_2O (%)	CaO (%)	MgO (%)
BBG2	25.5	765741	6790634	708	Feldspar, Brilliant White	19.43	0.08	12.72	0.07	0.03

Blesberg Mine XRD Sampling

The 4 composite samples were further analysed using X-Ray powder Diffraction (XRD) to gain insights as to their respective mineralogy.

The sampling was intended to provide an indicative mineralogy of the historical products.

The composite spodumene and feldspar samples reported highly prospective mineralogies, containing a a majority of spodumene and microcline.

A summary of results is shown below in Table 1c.

Table 1c

Sample ID	Spodumene*	Eucryptite*	Petalite*	Quartz	Plagioclase	Microcline	Muscovite
BBG3	80.31	0.35	0	2.35	11.38	0.72	4.89
BBG4	41.42	14.77	2.73	1.04	33.61	1.24	5.19
BBG2	0	0	0.37	0	21.57	78.06	0

*Spodumene chemical formula is $LiAl(SiO_3)_4$ – Li max of 2.05% or 4.41% Li_2O equivalent.

*Eucryptite chemical formula is $LiAlSiO_4$ – Li max of 5.5% or 11.84% Li_2O equivalent.

*Petalite chemical formula is $LiAlSi_4O_{10}$ – Li max of 3.3% or 7.1% Li_2O equivalent.

Table 2 – Assay Methods

Assay method and description	Elements and grade range
FP-01-01-30 (Li by HF-HNO3-HCLO4 digestion, HCl Leach)	Li - 0.005 – 10 %
ME-XRF05 (A pressed pellet is prepared and analyzed by Wavelength Dispersive XRF)	Ta - 10-5,000 ppm Nb - 2-4,000 ppm Th - 4-4,000 ppm U - 4-10,0000 ppm
Qualitative and quantitatative XRD (using a PANalytical Empyrean diffractometer with PIXcel detector and fixed slits with Fe filtered Co-Kα radiation and identified using X'Pert Highscore plus software)	Spodumene – 1-100% Eucryptite – 1-100% Petalite – 1-100% Quartz – 1-100% Plagioclase – 1-100% Microcline – 1-100% Muscovite – 1-100%

Airborne/Satellite Imagery Mapping & Soil Sampling Orientation Study

Outcropping pegmatites at Blesberg can be identified clearly by their colour on airborne/satellite imagery. Therefore, mapping of the project area using airborne/satellite images has allowed the prospectivity of the ground to be quickly assessed. In the case of the Blesberg Project, the real width of the outcrop mapped is often obscured by boulders and scree. Nonetheless, the airborne/satellite mapping has effectively identified large concentrations of pegmatite outcrop and/or to significantly thickened pegmatites.

As a result of the mapping and the follow-up ground reconnaissance, two areas were identified as particularly attractive to initial exploration efforts. These were; P1, which is considered to be the continuation along strike of the historical workings towards the Northwest, and; P2, which is a substantially thickened and dense sequence of pegmatites to the East of the historical workings (see Figure 3).

Both areas were selected owing to their amenability to low cost exploration due to their location on the low-lying sand plain immediately adjacent to and between known pegmatites.

Before commencing a comprehensive soil sampling program, AVL conducted an initial soil sampling orientation program across P1. Initial results from the orientation soil sampling are currently under review and will be reported on once the final results become available and have been fully interpreted.

Site Activities

Locally based AVL management continued the exploration activities and strengthened the good working relationship with the existing shareholders of SALT as well as other stakeholders.

During two recent visits to the Blesberg Mine exploration activities completed included:

- Planning and subsequent pegging of priority drill holes; A programme to resolve the pegmatite at depth and along its strike length in addition to its continuation undercover was completed during the period. The program should allow AVL to estimate a JORC compliant resource following the completion of the upcoming drilling (see Plate 1).
- New soil sampling traverses to the west of recently identified Blesberg Mine pegmatite outcrop in area P1. To validate results from the initial soil sampling orientation, a new soil sampling survey with the aim of identifying pegmatites under sand cover to the west of the Blesberg Mine was carried out. Soil samples were collected every 10 metres along 5x ~200m baselines. Samples have been sieved to -2mm in preparation for mineral assaying and will be assessed against results from the preliminary orientation soil survey. (see Plate 2).
- Meetings with local earthworks providers, accommodation facilities, freight companies, diesel providers and consumables stockists are all in advanced stages. Furthermore, the Department of Mineral Resources South Africa have been actively consulted and they are very positive towards AVL's presence and upcoming drilling project.
- Reconnaissance for water revealed several wells where water is being pumped and used at surface. The closest of these sites is less than 4km from the Blesberg Mine and situated on crown land. It is clear from the satellite image that this well is downstream from an alluvial channel that begins on the Blesberg Mine Prospecting Right. Procedures to access the water are now being followed.

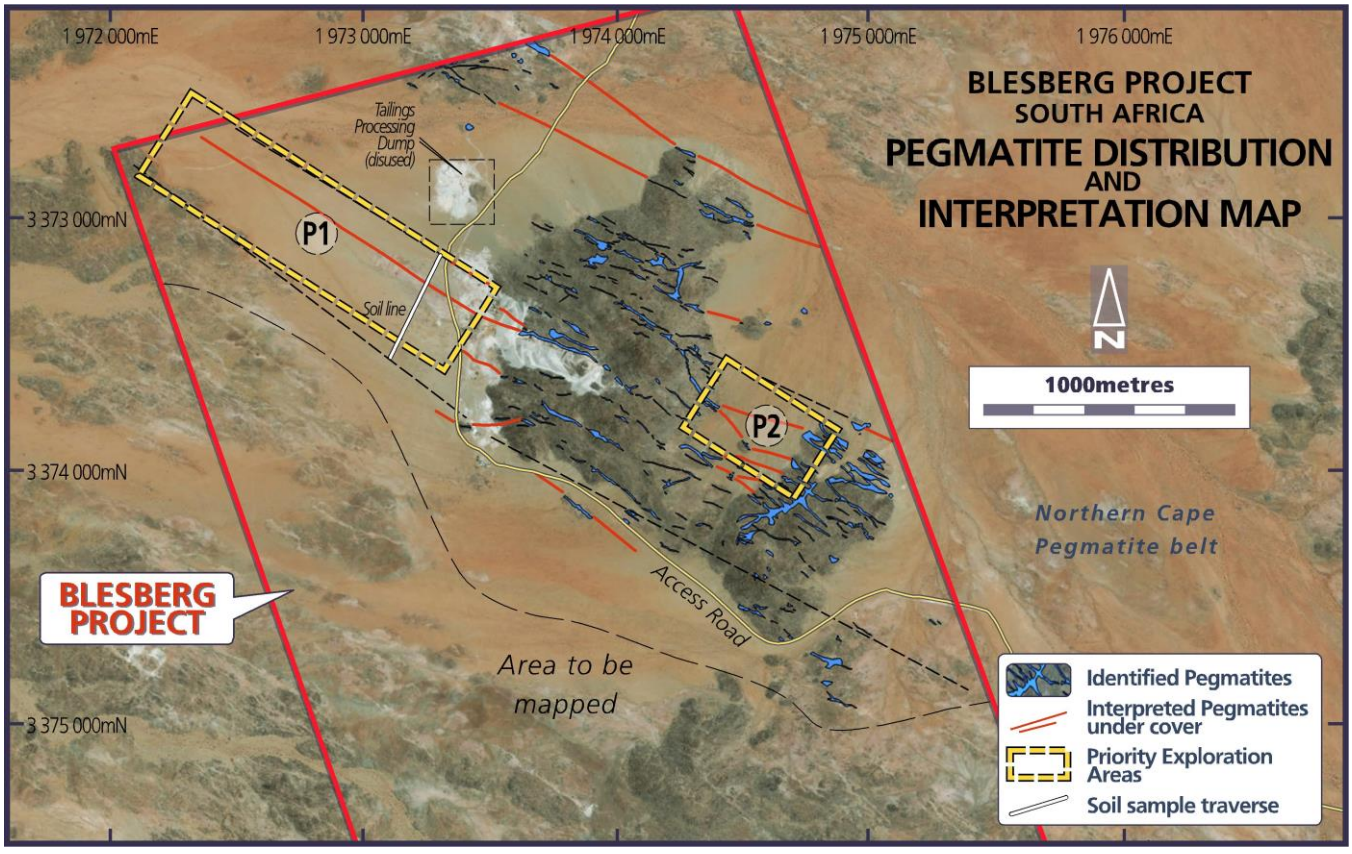

Figure 3 – Blesberg Project showing airborne/satellite mapping of pegmatites and prospective exploration targets in the sand plain

Plate 1: View from Blesberg Mine looking WNW showing planned drill hole and sighting peg.

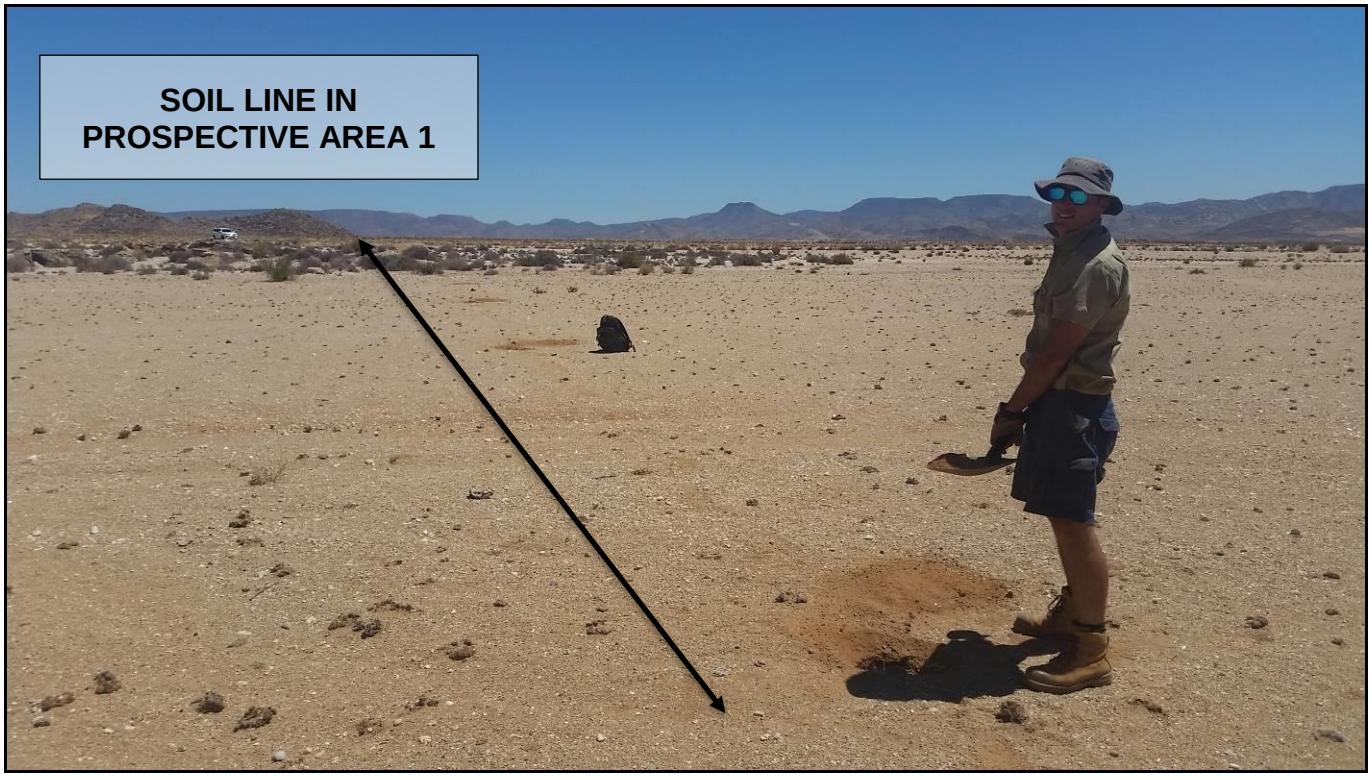

Plate 2: View looking SSW along new soil line in P1, designed to define pegmatite under shallow cover

Plate 3: View looking ENE towards Blesberg Mine showing water well in foreground.

VSUN Energy Update

AVL is pleased to advise that its 100% owned subsidiary, VSUN Energy Pty Ltd has submitted an Expression of Interest (EOI) to the Western Australian State government-owned power transmission utility, Western Power for the Kalbarri Reliability Improvement Project.

Western Power undertook a feasibility study 'to understand whether new and emerging technologies, coupled with local generating capacity, might provide a viable improvement to local power supplies that is acceptable to the local community and consistent with Western Power's regulatory obligations.' The results of the study were released in October 2016[1].

In early December 2016, EOIs were sought from companies for suggested solutions for Western Power's Kalbarri Reliability Improvement Project. VSUN Energy, with its partners, has successfully submitted a response utilising vanadium redox flow batteries (VRB), which will be evaluated by Western Power alongside other responses.

VSUN Energy's solution incorporates a flywheel, which can provide a large amount of energy over a very short timeframe, coupled with a series of 17 VRB, providing up to 17 MWh of stored energy. This solution could provide the energy storage Kalbarri requires for the next 20+ years, with room for expansion also factored in. The service life, cyclability and storage capacity available from this solution form the basis for a genuinely autonomous microgrid.

If the project progresses to the next stage, Western Power is expected to release a Request for Tender or a Request for Proposals using a solution, or combination of solutions, presented under the EOI process.

Note 1: See https://westernpower.com.au/about/reports-publications/kalbarri-microgrid-study/

Further information

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About Australian Vanadium Limited

AVL is a diversified resource company with an integrated strategy with respect to energy storage, seeking to offer investors a unique exposure to all aspects of the vanadium value chain – from resource through to steel and energy storage opportunities as well as other energy storage metals exposure through the acquisition and evaluation of lithium/tantalum projects.

AVL is advancing the development of its 100%-owned, world-class Gabanintha vanadium project. Gabanintha is currently one of the highest-grade vanadium projects being advanced globally with Measured Resource of 7Mt, Indicated Resource of 17.8Mt and Inferred Resources of 66.7Mt, a total of 91.4Mt, grading 0.82% V_2O_5 and containing a discrete high-grade zone of 56.8Mt, grading 1.0% V_2O_5 reported in compliance with the JORC Code 2012 (see YRR ASX Announcement 10 November 2015).

AVL has developed a local production capacity for high-purity vanadium electrolyte, which forms a key component of vanadium redox flow batteries (VRB).

AVL, through its 100%-owned subsidiary VSUN Energy Pty Ltd, is actively marketing VRB in Australia through a distribution agreement with world-leading flow battery manufacturer, GILDEMEISTER Energy Storage GmbH.

As part of its broader energy metals focus, AVL has also commenced a staged acquisition of a controlling 50.03% interest in the Blesberg Lithium-Tantalum Project in South Africa (see ASX Announcement 21 December 2016).

Competent Person Statement – Blesberg Exploration Program

The information relating to the Blesberg Lithium-Tantalum Project exploration program reported in this announcement is based on information compiled by Mr Vincent Algar. Mr Algar is a Member of The Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of the Company. Mr Algar has more than 25 years' experience in the field of mineral exploration. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr. Algar consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

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Table 3: Section 1 – Sampling Techniques and Data – Blesberg

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralization that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	• 3 rock chip/grab samples were collected from 2 different sampling locations Sampling was undertaken as part of the Company's due diligence of historic workings at the Blesberg Mine. Samples were taken from historical stockpiles and interpreted to comprise of lithium bearing and feldspar bearing pegmatite lithologies. . • Samples masses range from 23.4kg – 25.5kg (refer to Table 1). Sample locations were determined with a hand-held GPS, coordinates and geological descriptions were noted for each sample. • The sampling program was reconnaissance in nature, samples were taken at the discretion of the geologist based on visual inspection of rock units.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method etc.).	• No drilling was undertaken during this programme.

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximize sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/course material.	• No drilling was undertaken during this programme.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant intersections logged.	• No drilling was undertaken as part of sampling this programme.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• All samples were prepared at Scientific Services in Cape Town, South Africa. Samples were initially split into 2, one half was crushed to -2mm and milled to 95% passing 75 microns. A 100g sample was then split off and submitted to XRA laboratories in Pretoria and assessed as per the methods in Table 3. The other half was retained. • Samples are sufficient for the grain size of the material being analysed. • No other quality control procedures were considered necessary for this program.

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Details of the laboratory procedures used for assaying the samples is detailed in Table 3. • No geophysical tools, spectrometers or handheld XRF instruments were used in the field in this sampling programme. • Scientific Services and XRA utilised standard internal quality control measures including the use of standards and duplicates. • No Company implemented quality control procedures were considered necessary for this style of sampling program.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss and adjustment to assay data.	• Sample ID, location (east/north), nature of sample site and description were entered into a spreadsheet in the field. • Photographs were also taken of all sample locations
Location of data points	• Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control. •	• All coordinate and topographical control data was recorded using a hand-held GPS utilizing South African Grid LO17/WGS84.

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Sample collection was based on historical stockpiles of spodumene and feldspar respectively and sampled at the discretion of AVL's geologist.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• No drilling was undertaken during this programme.
Sample security	• The measures taken to ensure sample security.	• Samples were held under the control of AVL's geologist until they were dispatched to Scientific Services in Cape Town and by reputable carrier ontoXRA in Pretoria.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews undertaken for this sampling programme

Section 2 Reporting of exploration results - Blesberg

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• Programme undertaken on granted prospecting right (NC) 940 PR held by SALT. • Boundaries of Prospecting Right (NC) 940 PR are shown in Figure 3. The prospecting right covers an area of 887 hectares • The prospecting right lies on part of the farm Steinkopf No 22. • There are no material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings • The Prospecting Right was granted in 8 May 2013 for a period of 5 years. • There are no known impediments to operating in the area.

Criteria	JORC Code Explanation	Commentary
Exploration done by other parties	• Acknowledgement and appraisal of exploration by other parties.	• As the Blesberg Mine has in the past been held privately details of production and exploration work have generally not been available. • In 1968 the Geological Survey of South Africa prepared an unpublished report *The Geology of the Noumas Pegmatite, Namaqualand* by D.H De Jager. • In 1972 the Geological Survey of South Africa prepared and published the report *The Main Pegmatites in the area between Steinkopf, Vioolsdrif and Goodhouse, Namaqualand* by I.C Schutte which included a detail review of the Blesberg (Noumas) pegmatites. • In 2006 a Geological Society of South Africa paper by H. Minnaar and H.F.J. Theart titled *The exploitability of pegmatite deposits in the lower Orange River area (Vioolsdrif – Henkries – Steinkopf)* considered the economics of commercial mining of feldspar only.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No data aggregation methods have been used in reporting the Sampling results. • Table 1 sets out the assay results for all 3 samples collected.
Relationships between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• As the geochemical results thus far collected by AVL personnel are from surface, any potential depths of mineralisation or orientations can only be inferred from geological observations on the surface and hence are speculative in nature.
Diagrams	• Appropriate maps and section (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• See figures in the release.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Table 1 sets out the assay results for all 3 samples collected. Assay results for lithium bearing lithologies range from 2.86% Li_2O to 4.76% Li_2O. Assay results for feldspar bearing lithologies range from 19.43% Al_2O_3 to 0.08% Fe_2O_3.

Criteria	JORC Code Explanation	Commentary
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• No other substantive exploration data from the sampling program, or other historical reports, has been excluded from this report.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• The Company intends to commence initial exploration, including drilling, at the Blesberg Mine and elsewhere on (NC) 940 PR as detailed in this report.